

**New Program Proposal
Institute in Human Factors and Ergonomics
Clemson University**

Summary

Clemson University requests approval to create an Institute in Human Factors and Ergonomics to be implemented in January 2012.

The Program Planning Summary was submitted to the Commission on October 28, 2008, and reviewed and voted upon favorably without substantive comment by the Advisory Committee on Academic Programs (ACAP) on January 15, 2009. The Clemson University Board of Trustees approved the proposal on October 17, 2008, and the full proposal was received by the Commission on August 15, 2011.

According to the proposal, the proposed Institute will provide a structure for faculty in the Psychology, Industrial Engineering, and Computer Science Departments to apply cutting-edge scientific principles to the area of Human Factors and Ergonomics, which studies the interactions of humans and technology in a variety of contexts, including the home, workplace, military, transportation, and entertainment. The goals of the Institute are to unite the Human Factors and Ergonomics faculty currently spread throughout various Departments and provide a coordinated effort to bring national prominence to Clemson within this growing research area; attract additional funding opportunities; and provide support to faculty conducting research in the area in finding and managing grants and contracts.

The proposal states that the Institute is needed to formalize the cross-department relationships and unite and strengthen exiting research currently being conducted in Human Factors and Ergonomics. The proposal states that during the past five years, the institution has had more than \$750,000 in active grants and contract expenditures that could be associated with the proposed Institute. The proposal further states that the proposed Institute will allow funded research in Human Factors and Ergonomics to be routed through one administrative unit, so that the institution can offer dedicated administrative support and resources to faculty conducting the research. The proposal also states that the proposed Institute will afford better marketing opportunities to attract potential graduate students, faculty, research sponsors, and industry partners in this research area.

Presently, Clemson offers the only accredited Human Factors and Ergonomics graduate degree program in South Carolina. The proposal states that there are eighteen Human Factors Psychology doctoral programs in the United States. The proposal also states that Virginia Tech has a center similar to the proposed Institute, but that the center is concentrated in Industrial Engineering and is not interdisciplinary.

The proposal states that the Institute will be comprised of 23 faculty who will hold primary appointments in existing academic units and be Associates of the Institute. New faculty will added to the Institute when faculty with Human Factors and Ergonomics expertise are hired to support existing programs. The proposal also states that Dr. Eric Muth of the Department of Psychology will serve as Director of the Institute and that Dr. Scott Shappell of the Department of Industrial Engineering will serve as Associate Director. The initial appointment of the Director and Associate Director will be 0.25 FTE and funds for their release time and salary will be derived from the home academic department or through funds received for grant or contract research generated by the Institute.

The proposal states that no physical plant needs are anticipated for the proposed Institute. The proposal includes \$35,000 for equipment which will be supported by the Institute; the equipment purchased will be available to nonparticipating faculty, departments, and organizations for a fee. The proposal also states that library resources are sufficient for the proposed Institute and its projects.

New costs and sources of financing identified by the institution for the proposed program are shown in the following table.

ESTIMATED NEW COSTS BY YEAR						
CATEGORY	1st	2nd	3rd	4th	5th	TOTALS
Program Administration	0	0	0	0	0	0
Faculty Salaries	\$30,000	\$30,900	\$31,827	\$32,782	\$33,766	\$159,275
Graduate Assistants	0	0	0	0	0	0
Clerical/Support Personnel	\$15,000	\$15,450	\$15,914	\$32,400	\$33,372	\$112,136
Supplies and Materials	\$1,000	\$2,255	\$4,569	\$5,000	\$5,000	\$17,824
Library Resources	0	0	0	0	0	0
Equipment	\$2,500	\$5,000	\$7,500	\$10,000	\$10,000	\$35,000
Facilities	0	0	0	0	0	0
Travel	\$7,500	\$9,000	\$12,000	\$15,000	\$15,000	\$58,500
TOTALS	\$56,000	\$62,605	\$71,810	\$95,182	\$97,138	\$382,735

SOURCES OF FINANCING BY YEAR						
CATEGORY	1 st	2 nd	3 rd	4 th	5 th	TOTALS
Tuition Funding	0	0	0	0	0	0
Program-Specific Fees	0	0	0	0	0	0
State Funding	0	0	0	0	0	0
Reallocation of Existing Funds – Department Level Cost-share	\$34,125	\$34,125	\$34,125	\$34,125	\$34,125	\$170,625
Reallocation of Existing Funds – College Level Support Commitment	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000
Indirect Grant Returns from Research Generated by Institute Associates	\$23,500	\$31,255	\$41,569	\$55,287	\$73,532	\$225,143
TOTALS	\$87,625	\$95,380	\$105,694	\$119,412	\$137,657	\$545,768

These data show that if the institution contains costs as they are shown in the proposal, the proposed Institute will be able to cover costs beginning in the first year and thereafter. The proposal notes that costs shown in this table will only be incurred if a funding source is identified and that the Institute will be self-sustaining through research grants, contract research services, and indirect funds generated on sponsored programs.

In summary, Clemson University requests approval to create an Institute in Human Factors and Ergonomics. The proposed Institute will unite faculty housed in different Departments who are currently conducting research in the area and provide a structure for them to receive dedicated administrative support and resources.

Recommendation

The staff recommends that the Committee on Academic Affairs and Licensing commend favorably to the Commission the proposed Institute in Human Factors and Ergonomics at Clemson University, to be implemented in January 2012, provided that no “unique cost” or other special state funding be required or requested.